

THE TREATMENT OF CANCER OF THE RECTUM.¹

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THE question of what surgical procedure is justifiable in any given case of cancer of the rectum is frequently hard to decide, especially from the stand-point of relieving the patient the most with the incurrence of the minimum risk.

The recognized operations are four in number: *Extirpation, Colotomy, Posterior Linear Proctotomy, and Curettage.*

Extirpation.—The ideal method of treating cancer of the rectum would be by extirpation, as is done in cases of the same disease when the mammary gland is the seat of trouble; but, unfortunately, it is not often that the rectal neoplasm is discovered in time to permit of the entire removal of the growth and of all glandular involvement, consequently, it is my belief, that the cases in which this operation is indicated will always be confined to a relatively small number.

Colotomy.—On the other hand, colotomy is quite practicable in a large number of instances, and the benefits derived from its performance are thus minutely described by Dr. Charles B. Kelsey:² "It relieves pain, does away with the constant tenesmus and discharge from the rectum, which by their exhausting effects are the immediate cause of death; delays the development of the disease by preventing the straining and congestion of defecation; prevents absolutely the complication of intestinal obstruction, which is another cause of death; enables the patient to sleep, eat, and gain flesh, and often makes him think himself cured in spite of the plainest prognosis to the contrary. Instead of passing his days and nights upon the commode, wearing out his life in the effort to free the bowel from its irritation, he has one or perhaps two solid fecal evacuations from the groin in twenty-four hours."

¹ Read at the meeting of the American Medical Association held at Atlanta, Ga., May, 1896.

² New York Medical Journal, November, 1892.



The foregoing description of the benefits derived from a colotomy is no exaggeration. It is the operation to which I would cheerfully submit were I a sufferer from cancer of the rectum which had reached the state of operative interference. In this connection I would cite the following case, which I consider as a typical one for the operation of inguinal colotomy:

T. J. P., a male, American, aged 52 years, a clerk by occupation, first consulted me in 1893. At that time his history was as follows:

Family History.—Parents dead, one at age of 60, of pneumonia, the other of rheumatism at 80. Oldest brother died at 40 of gastric cancer. Patient the youngest of seven children.

Personal History.—Healthy as a child. Married at 40. With the exception of lumbago and several attacks of presumed malaria he has enjoyed good health up to present illness. Has been a moderate user of alcohol, but an inveterate smoker. No venereal trouble. For many years has been constipated.

Present trouble began about four years before his visit to me. The pain in his back, which he attributed to lumbago, became worse. His bowels became loose. In the morning, he would have apparently a normal fecal stool, and later in the day one or more watery passages. The movements were attended by considerable straining and a sensation as though the bowel had not been entirely emptied. The urine was voided frequently during the day and he was obliged to empty his bladder several times during the night. Later on, he noticed that his passages, when formed, were not as thick as they had been, but what caused him anxiety was the fact that he passed about a tablespoonful of an offensive bloody fluid, several times daily, and the movements were accompanied by severe pain over the sacrum. These symptoms becoming aggravated, and the patient being unable to rest comfortably in any position, night or day, together with the fact that he was steadily losing flesh and had no appetite, led him to consult me.

At this time, examination revealed the following condition: Varicose veins of both legs, but much worse on the left side. Cachexia not marked. External and internal hemorrhoids noted. A growth was detected about four inches from the anus, which was quite hard and nodular. Its upper limits could not be ascertained.

Consent was given to perform an inguinal colotomy.

Under ether anesthesia, the usual incision was made into the abdominal cavity, and the peritoneum was drawn up and attached to the skin by sutures. The colon readily presented, and at the site selected for the artificial anus a loop of it was brought out into the

wound and a glass rod, four inches long, was passed at a right angle to the line of incision under the colon through a puncture made in the mesentery ; this was done so as to fix the bowel in the desired position. The intestine was then sutured around the wound to the skin and parietal peritoneum ; seven or eight fine silk sutures being used on either side, and the last suture at each angle being placed across from one side to the other. The suturing of the bowel in this manner prevented the protrusion of the small intestine and consequent danger of strangulation.¹

The dressing consisted of gauze placed between the glass rod and skin, so as to prevent undue pressure, and the lower strata of gauze overlying the intestine was soaked in carbolized olive oil, to obviate any subsequent adhesion to the bowel from the lymph filling the meshes of the gauze which is apt to ensue unless this precaution be taken.

The patient did well after the operation and convalescence was all that could be desired. The intestine was opened on the third day. In two weeks he was allowed to get out of bed, and in another week to walk about generally. By means of a home-made abdominal band and the application of pledges of old linen and cotton over the artificial anus, he had and still has no difficulty in controlling the passage of wind and fecal matter. A truss was obtained for him, but was not so comfortable as the abdominal support mentioned.

He gained flesh, was able to eat and sleep well and attend to his business. The pain and inconvenience previously suffered were greatly relieved. During this time opiates were occasionally required. At present writing (three years since the operation), and for a year past, he has suffered considerable distress from pain over the sacrum and has not been able to work. Opium has to be used daily. The growth has increased and causes considerable vesical disturbance. It is probable that the patient may live for six months or a year longer.

In an article read before this association last year,² I went into a more extended discussion of the relative merits of extirpation and colotomy in the treatment of cancer of the rectum.

Posterior Linear Proctotomy.—I have never attempted to relieve malignant trouble affecting the rectum by means of a linear proctotomy. In benign stricture I have found it an excellent plan of treatment when combined with the subsequent use of bougies. Those surgeons who adopt this method for the relief of rectal cancer

¹ Fatal results from this accident are on record.

² Transactions, Surgical Section of the American Medical Association, 1895, pp. 101-104.

speak highly of its efficiency. Some going so far as to claim that it takes the place of both colotomy and excision.¹

Curettage.—In the present paper, I desire to call attention to and to emphasize the value of curettage in those cases of cancer in which the disease is within the lower three inches of the rectum and its character of such a nature as to permit of its more or less complete removal by the curette. In selected cases the operation is followed by a diminution of pain, bearing-down sensations, and discharge and the lumen of the bowel is enlarged.

Some patients object to having an artificial anus and refuse to have a colotomy performed; others consider the curettage of the growth a less dangerous operation and prefer a procedure which, to them, is less abhorrent than the idea of an artificial opening, in an abnormal position, for the passage of feces. In some of these cases curettage can be done with decided benefit.

In certain cases the combined operations of colotomy and curettage will afford the patient much more relief than where one or the other procedure is individually adopted. It is true that only temporary relief is afforded by either curettage or colotomy, but in the majority of cases this is all we can offer the patient under any plan of treatment in vogue at the present time.

During the past two years I have curetted the rectum for the relief of malignant trouble in seven different cases. In only one case was the operation deemed unsatisfactory. This was in a patient of Dr. D. F. Greenwald, of Philadelphia, with whom I saw the patient in consultation. I am indebted to the doctor for the following history: "Mrs. R. was treated by me (Dr. Greenwald) for a rectovaginal fistula about five years ago. At that time there was no evidence of contraction of the calibre of the bowel and no other symptoms pointing to the presence of cancer. For a period of three years following the operation for fistula she suffered no discomfort and was able to pursue her usual duties. Two years ago she complained of pain during defecation, which was attended by a discharge of glairy mucus, streaked with blood. Before examination a decided decrease or narrowing of the bowel was discovered about two and a half inches above the anus. Antiseptic douches and the use of rectal bougies daily benefited the case for more than a year. She then complained of bearing-down pains and the countenance assumed the characteristic carcinomatous cachexia. These symptoms continued with greater severity until you saw her. After the curetting operation she was unable to leave her bed, her appetite failed, emaciation

¹ Mr. Charles B. Ball, F.R.C.S.I., Diseases of the Rectum and Anus, p. 336.

followed, and death from exhaustion ensued in two months and three days."

Even in this case, which was a most unfavorable one for any operation, the patient was much relieved of pain, and the two months she lived were certainly passed with more comfort than would have been the case had no operative interference been attempted.

The results following curettage are best described by recording the history of a typical case: J. M., a colored man, aged 33 years, by occupation an engineer, applied for treatment at our clinic at the Polyclinic Hospital, about two years ago.

Family history negative.

Personal history negative, except a possibility of his having had syphilis; this fact the patient denied, but the records at the Pennsylvania Hospital, Philadelphia, where he had previously been treated, indicate otherwise.

Present trouble began some three years previous to his coming under my observation, with bloody discharges from the rectum and a feeling of distress about the anus. He stated that on two occasions, during this time, he had been admitted into the wards of the Pennsylvania Hospital and had the rectum cut, and that this was followed by the passage of bougies. He dreaded so much the passage of the bougies that, on each visit to the hospital, he left as soon as he could obtain his discharge.

At the time he came under my care he had a more or less constant bloody discharge from the rectum, considerable pain at stool and for some time following the movement; he was very emaciated. Examination revealed a mass occupying the lower two inches of the bowel,—part of the growth protruding through the anus. Abdominal palpation indicated the presence of nodular masses within that cavity especially marked on the left side above the sigmoid flexure. At first he refused operative interference, six months later he consented to enter the hospital.

Upon admission to the wards of the Polyclinic and after the lapse of several days, the patient was prepared for operation, and upon the day selected he was etherized, the sphincters were stretched, and the growth was thoroughly scraped away with a sharp spoon curette. A weak solution of permanganate of potassium was employed for douching purposes. In some places scissors had to be used to remove the denser and more indurated portions of the mass. The bleeding at the time and after the completion of the operation was not alarming. The parts were fully dusted with iodoform and the rectum was plugged by means of a good-sized piece of gauze attached to a large rubber drainage-tube, which latter had been closely fitted over a glass tube

to keep it patent,—the rubber tube at the same time protecting the glass should it by accident break. Around the tube but within the folds of the gauze the packing was placed. The dressing was completed by a fine pad of gauze and cotton and a tailed bandage. Recovery from the operation was perfectly satisfactory, and in a month's time the patient was given employment in the hospital as an orderly. He had not been able to work for over a year previously. The gain in flesh was very marked. For a long period he was given the iodide of potassium, but any increase above five grains, thrice daily, produced nausea,—no good effect was noticed from its use. Four months later the patient was in such good health that he married.

A short while after this event the growth in the rectum was noticed returning and the discharge reappeared. Some pain was also complained of, and later on, defecation was accompanied by considerable distress and difficulty.

Six months after the first curettage he was again subjected to a similar operation. Ten days subsequently he stated that he felt well and was free from pain. Graduated bougies were now used daily.

A month later, marked tympanites suddenly appeared and the patient was unable to pass either wind or feces. Various laxatives were employed and several enemas administered before the bowels were made to move, which was not until the third day. Several similar attacks ensued which occasioned considerable trouble before relief was obtained. Finally the patient became confined to his bed through sheer weakness, and death occurred from exhaustion about nineteen months from the time I first saw him.

The autopsy revealed cancerous involvement of the liver mesentery and intestine.

In conclusion, I would roughly summarize the indications for the operative treatment of rectal cancer thus :

Extirpation, to be considered only in those cases in which the disease admits of the hope of obtaining a permanent cure.

Colotomy, when the rectum is involved above the lower three inches of the bowel and the disease has produced an appreciable obstruction.

Curettage, or a *posterior linear proctotomy*, or the two combined, for those cases in which the disease occupies the lower three inches of the rectum.

